OFIGNAL



19k

BEFORE THE ARIZONA CORPORATION COMMISSION 1 2 **COMMISSIONERS** 2008 STO 12 P 3: 45 3 MIKE GLEASON - Chairman WILLIAM A. MUNDELL I COMP COMMA DOCKET COMMA 4 JEFF HATCH-MILLER AL KRISTIN K. MAYES 5 **GARY PIERCE** 6 7 DOCKET NO. W-02450A-04-0837 IN THE MATTER OF THE APPLICATION OF WATER UTILITY OF GREATER TONOPAH, 8 INC., AND ARIZONA CORPORATION, FOR **MOTION FOR** AN EXTENSION OF ITS CERTIFICATE OF 9 **EXTENSION OF TIME** CONVENIENCE AND NECESSITY TO ENCOMPASS ALL OR PORTIONS OF Arizona Corporation Commission 10 SECTIONS 15, 17 AND 22, T2N, R52, DOCKETED G&SRB&M, MARICOPA COUNTY, 11 ARIZONA (AKA THE HASSAYAMPA SEP 1 2 2008 RANCH DEVELOPMENT) 12 **DOCKETED BY** 13 Water Utility of Greater Tonopah ("Global Tonopah") respectfully requests an extension 14 of time to file the Certificate of Assured Water Supply ("CAWS") or Designation of Assured 15 Water Supply ("DAWS") for the Hassayampa Ranch subdivision. Global Tonopah is currently 16 required to file a CAWS "where applicable or when required by statute" by September 23, 2008.1 17 Global Tonopah requests that this deadline be extended to May 16, 2010 to match the deadline 18 established in Decision No. 70357. A recent, renewed request for service from Harvard 19 Investments, the developers of Hassayampa Ranch, is attached as Exhibit A. 20 The purchase of Global Tonopah. 21 I. 22 In November 2004, the prior owners of Global Tonopah filed an Application for this CC&N Extension, which led to the Commission's decision in this docket to add a little over three 23 square miles to Global Tonopah's CC&N to serve the Hassayampa Ranch subdivision. Global 24 Tonopah is a subsidiary of West Maricopa Combine, Inc. ("WMC"). The WMC utilities were 25

27

26

small and poorly capitalized. They faced numerous challenges, including meeting the new arsenic

<sup>&</sup>lt;sup>1</sup> See Decision No. 68307 (Nov. 14, 2005) and Procedural Order dated April 25, 2008.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

standards. They lacked any ties to wastewater providers, and therefore they could not provide recycled (reclaimed) water. They did not have a regional plan for sustainably managing water resources.

Global Water acquired Global Tonopah as part of its acquisition of WMC in 2006. After its purchase of WMC and its five utilities, Global Water has endeavored to do three things:

- 1. Understand the operational decisions and infrastructure challenges throughout the WMC utilities, with priority given to those related to Safe Drinking Water Act compliance issues;
- 2. Achieve positive control over the numerous conditions and deadlines that existed throughout the many decisions affecting WMC utilities; and
- 3. Put the WMC utilities into a regional, sustainable, long-term water resource plan.

This motion reflects all three of those efforts. Global Water regrets that it continues to seek extensions for some of the WMC utilities' compliance conditions and deadlines - but it is important to understand that those extension requests are part of our three-prong approach to gaining positive control over the utilities and assuring that utility service throughout each meets or exceeds all standards for quality, compliance, and capacity.

The Global Tonopah system has had challenges in each of those areas, as the Commission is well aware. Global Water believes however that the progress made in the past two years needs to be continued, rather than abandoned, and therefore requests this Commission grant the necessary extensions.

#### Progress towards assured water supply. II.

Global Tonopah has diligently pursued obtaining an assured water supply for Hassayampa Ranch. An Analysis of Assured Water Supply ("AAWS") for Hassayampa Ranch is attached as Exhibit B. The AAWS is a determination by ADWR regarding the physical availability of water for Hassayampa Ranch, and it is a key step towards obtaining the CAWS or DAWS. The AAWS is specific to the Hassayampa Ranch subdivision that is the subject of this docket. The AAWS

specifically concludes that there is enough water to meet the projected demands of the Hassayampa Ranch subdivision.

Global Tonopah has requested a DAWS from ADWR. If a DAWS is issued, no CAWS is necessary, and therefore a CAWS would not be "applicable" or "required by statute" as specified in Decision No. 68307. Generally, a DAWS is considered superior to a CAWS because a DAWS is subject to on-going supervision and re-assessment by ADWR. In contrast, once a CAWS is issued, and at least one home is sold, a CAWS is final and cannot be revoked or altered even if problems develop later.

### II. ADWR's regional approach.

Numerous applications for AAWS, CAWS or DAWS are pending for lands within the Lower Hassayampa Sub-basin. ADWR ultimately requested that the developers, cities and water companies develop a regional model of groundwater in the Lower Hassayampa Sub-basin to facilitate ADWR's analysis of groundwater resources in that area. ADWR strongly preferred a region-wide approach, rather than trying to determine water availability on a parcel-by-parcel basis. Accordingly, a coalition of developers and the Town of Buckeye began the expensive and difficult process of preparing the model. Mike Pearce, former Chief Counsel of ADWR and a noted expert on water law and policy in Arizona, was closely involved in coordinating this study, and he previously testified about the study. Mr. Pearce testified that this regional study was the "most sophisticated" he had been involved with in his many years of experience, and that preparing the study was an extensive, two-year process.<sup>2</sup> A copy of Mr. Pearce's testimony is attached as Exhibit C.<sup>3</sup>

This study, known as the Lower Hassayampa Sub-basin Hydrologic Study and Computer Model ("Sub-basin Study") was prepared by Brown and Caldwell and submitted to ADWR for review and approval in November 2006. The Lower Hassayampa Sub-basin itself and the sub-basin study cover all of Global Tonopah's service area, as well as significant additional areas in

<sup>&</sup>lt;sup>2</sup> Hearing Tr. December 17, 2007 in Docket Nos. W-02450A-06-0626 et al. at page 96

<sup>&</sup>lt;sup>3</sup> Id., at 90-102.

the Western portion of Maricopa County. Attached as <u>Exhibit D</u> is a map showing the area covered by the study.

ADWR is carefully considering the water resources issues for the Lower Hassayampa Subbasin on a regional basis, and it has wisely required all affected parties to continue to provide assessments and information in its review. In fact, ADWR has worked with local governments and developers and it has been reviewing the Sub-basin Study for almost two years. ADWR continues to require more time to analyze the water supply issues and to revise and/or approve the Sub-basin Study. Global Water fully supports ADWR's desire to carefully, methodically, and if need be, slowly evaluate the complex interplay of growth and water supply in this sub-basin.

Global Tonopah's DAWS application is dependent on the Sub-basin Study which serves as its technical basis. ADWR would not support development or use of any other technical basis for Hassayampa Ranch's Assured Water Supply. Thus, Global Tonopah supports ADWR's regional approach, and its vigilance to "get the job done right." Accordingly, Global Tonopah requests an extension of time.

Mr. Pearce testified that relying only on groundwater to serve the sub-basin would be problematic, and that therefore the use of recycled (reclaimed) water is critical for this area.<sup>4</sup> At the time the CC&N in this docket was issued in 2005, no plans for use of recycled water were in place, and there was no wastewater utility with a certificate for Hassayampa Ranch. However, in 2006, Global Tonopah was purchased by Global Water, a company dedicated to the use of recycled water. Also in 2006, an affiliated wastewater utility, Hassayampa Utilities Company, was granted a CC&N for Hassayampa Ranch. As a result, Global Tonopah now has plans in place to provide recycled water service to Hassayampa Ranch and the other new developments in this region – an outcome which the study shows is critically important.

After the study was submitted to ADWR, Global Tonopah submitted an application for a DAWS based on the study. Due to the regional nature of the study, the application covered all of

<sup>4</sup> Id. at 99-100.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

Global Tonopah's CC&N area, not just the relatively small area covered by this docket. After the application was submitted, Global Tonopah has maintained an on-going dialogue with ADWR regarding the application. Global Tonopah has responded to several requests for additional information, and on August 22, 2008, ADWR sent a letter requesting even more information. The August 22 letter notes that ADWR is continuing to review water availability issues in the Lower Hassayampa Sub-basin. Based on the August 22 letter, it does not appear that a DAWS will be issued on or before the September 23, 2008 deadline in this case.

At this time, ADWR simply needs more time to fully analyze the regional supply and demands for water in the Hassayampa Sub-basin. Global Tonopah believes that it is entirely appropriate for ADWR to closely review the regional situation. It is critical that ADWR makes a fully informed and well-considered decision. Global Tonopah, the Developers, the Town and others remain in on-going communication with ADWR and they continue to provide additional information to ADWR.

Global Tonopah and the other participants in the sub-basin study have been working with ADWR for a long period of time; and substantial resources have been devoted to pursuing the study and the designation application. However, at this point, Global Tonopah, ADWR and the other participants in this regional process simply need more time to complete the process.

#### III. The deadline should be extended to match the deadline in Decision No. 70357.

In this docket, the current deadline to obtain a CAWS (or a DAWS which would make the CAWS unnecessary) is September 23, 2008. Under Decision No. 70357 (May 16, 2008), Global Tonopah is required to obtain a DAWS on or before May 16, 2010. Global Tonopah's pending DAWS application covers the areas granted in this docket and the areas granted by Decision No. 70357. Again, this was a result of ADWR's request for a region-wide study of water availability in the Hassayampa Sub-basin. Global Tonopah requests that the deadline in this case be extended to match the deadline in Decision No. 70357. At the time Decision 68307 was issued (prior to Global's ownership of Water Utility of Greater Tonopah), it was contemplated that the developer would obtain a CAWS for Hassayampa Ranch based on a water resource analysis for that

ONE ARIZONA CENTER
400 EAST VAN BUREN STREET - SUITE 800
PHOENIX, ARIZONA 85004
TELEPHONE NO 602-256-6100
FACSIMILE 602-256-6800

subdivision only. Because Hassayampa Ranch has become part of this regional Sub-Basin Study from ADWR's perspective, having a separate deadline applicable only to that one subdivision no longer makes sense. Instead, Global Tonopah requests that the Commission establish May 16, 2010 as the unified deadline for the regional DAWS pending before ADWR.

### IV. Conclusion.

Global Tonopah has shown reasonable diligence in attempting to meet the current deadline by obtaining the Analysis of Assured Water Supply, by participating in the unprecedented and extensive regional modeling effort, and by pursuing its DAWS application. ADWR's regional approach to water supply is vitally important to protecting not only the water resources of the Lower Hassayampa Sub-basin, but the homeowners of today and the future who would be dramatically and irreparably harmed by a "rush to judgment." Global fully supports ADWR's regional, deliberate, and inclusive approach to evaluating this sub-basin. Under current circumstances, it is impossible for Global Tonopah to comply with the original deadline while at the same time cooperate with ADWR's regional approach.

Global Tonopah's pending DAWS application follows the ADWR approach. In this context, a separate deadline for only one subdivision is no longer the best approach. ADWR should take as much time as needed to complete its review, and the deadline should be extended to May 16, 2010 to match the deadline in Decision No. 70357.

RESPECTFULLY SUBMITTED this 12<sup>th</sup> day of September 2008.

ROSHKA, DEWULF & PATTEN, PLC

Bv

Michael W. Patten

Timothy J. Sabo

One Arizona Center

400 East Van Buren Street, Suite 800

Phoenix, Arizona 85004

1	Original and 13 copies of the foregoing
2	filed this 124 day of September 2008 with:
3	Docket Control Arizona Corporation Commission
4	1200 West Washington Street
5	Phoenix, Arizona 85007
6	Copy of the foregoing hand-delivered/mailed this 120 day of September 2008 to:
7	Lyn A. Farmer, Esq.
8	Chief Administrative Law Judge Hearing Division
9	Arizona Corporation Commission
10	1200 West Washington Street Phoenix, Arizona 85007
11	Janice Alward, Esq.
12	Chief Counsel, Legal Division
13	Arizona Corporation Commission 1200 West Washington Street
14	Phoenix, Arizona 85007
15	Ernest G. Johnson, Esq. Director, Utilities Division
16	Arizona Corporation Commission
17	1200 West Washington Street Phoenix, Arizona 85007
18	Brian Bozzo
19	Compliance Manager, Utilities Division Arizona Corporation Commission
20	1200 West Washington Street
21	Phoenix, AZ 85007
22	By Debbie Americal
23	
24	
25	
26	
27	

# **EXHIBIT**

**"**A"



August 7, 2008

VIA E-MAIL and REGULAR MAIL

Ms. Cindy Liles GLOBAL WATER RESOURCES 21410 N. 19<sup>th</sup> Avenue Suite 201 Phoenix, AZ 85027

> RE: Approximately 2,077 Acres Located 2.5 Miles North of Interstate 10 on the 339<sup>th</sup> Avenue Alignment Known As Hassayampa Ranch Request For Service

Dear Cindy:

This letter serves as a request for service to Hassayampa Ranch as follows:

Water Service from Water Utility of Greater Tonopah; and Recycled Water and Wastewater Service from Hassayampa Utility Company

We look forward to working with you.

Thank you.

Sincerely,

HASSAYAMPA RANCH VENTURES, L.L.C.

By: Hassayampa Ranch Partners, L.L.C.,

Its Member,

By: Harvard Investments, Inc.,

Its Manager

Christopher J. Cacheris

Vice President

# **EXHIBIT**

"B"

## ARIZONA DEPARTMENT OF WATER RESOURCES

Office of Assured and Adequate Water Supply

500 North Third Street, Phoenix, Arizona 85004 Telephone (602) 417-2465 Fax (602) 417-2467



JANET NAPOLITANO
Governor

HERB GUENTHER
Director

## ANALYSIS OF ASSURED WATER SUPPLY

February 28, 2005

File Number:

28-401585,0000

**Development:** 

Hassayampa Ranch

Location:

Township 2 North, Range 5 West, Sections 15-17 and 22

Maricopa County, Arizona

Phoenix AMA

Land Owner:

Algene Venture, an Arizona Joint Venture and PNR Southwest Partnership, an

Illinois General Partnership

The Arizona Department of Water Resources has evaluated the Analysis of Assured Water Supply application for Hassayampa Ranch pursuant to A.A.C. R12-15-712. The proposed development includes 5,707 single-family residential lots and 740 non-residential acres containing commercial and open space areas, schools, and rights-of-way. The water provider will be Water Utility of Greater Tonopah. Conclusions of the review are indicated below based on the assured water supply criteria referenced in A.R.S. § 45-576 and A.A.C. R12-15-701 et seq.

On the basis of the hydrologic study submitted and the Department's review, the Department has determined that 3,742 acre-feet per year of groundwater will be physically and continuously available, which equals the applicant's projected demands for the development of 3,742 acre-feet per year. The legal availability of the water is not proven at this time. The development is not located within the current service area of the Water Utility of Greater Tonopah. The development is outside the Certificate of Convenience and Necessity boundary of the Water Utility of Greater Tonopah. Applications for Certificates of Assured Water Supply that follow the Analysis of Assured Water Supply will need to provide a detailed plan of how water service will be established. This may include use of Type 1 or Type 2 water rights or recovery of long term storage credits to create a new or satellite service area, or extension of existing service area lines to include the proposed development. The CC&N will need to be extended to encompass the development area. Individual Notices of Intent to Serve will be required for each application for a Certificate of Assured Water Supply.

• Adequate Water Quality

Adequate water quality has not been demonstrated at this time. The proposed development lies outside the provider's current service area, therefore, no drinking water compliance data are available. No water quality data was submitted with the application.

To provide service in this area, a provider will likely have to construct new wells. The Arizona Department of Environmental Quality will require water quality analyses for new source approval for each well. This requirement of an Analysis of Assured Water Supply will be reevaluated for each application for a Certificate of Assured Water Supply.

- Consistency with Management Plan for the Phoenix Active Management Area
  The projected demand for the development is consistent with the Third Management Plan
  for the Phoenix AMA. Hassayampa Ranch will use low water use landscaping and
  plumbing fixtures will comply with the statewide Low Flow Plumbing Code.
- Consistency with Management Goal of the Phoenix Active Management Area
  The Assured and Adequate Water Supply Rules (A.A.C. § R12-15-705) allocate a
  volume of groundwater to each new subdivision in an AMA to allow for the phasing in of
  renewable supplies. This groundwater allowance may be increased by extinguishing
  irrigation grandfathered groundwater rights (IGFR). Any groundwater delivery in excess
  of the groundwater allowance must be met through the direct or indirect use of renewable
  water supplies (surface water or effluent). Options for demonstrating "consistency with
  management goal" include: 1) direct use of surface water or effluent; 2) recharge and
  recovery of surface water or effluent; or 3) membership in the Central Arizona
  Groundwater Replenishment District (CAGRD).

The application indicates that the proposed development will enroll the lands of the entire development, including the commercial and open space areas, schools, and other non-residential areas, in the CAGRD to meet this requirement. The membership documents must be executed and recorded before a Certificate of Assured Water Supply will be issued.

Prior to preparing an application for a Certificate of Assured Water Supply for an individual subdivision plat, the Phoenix AMA Office or the Office of Assured Water Supply may be contacted for further guidance.

• Financial Capability of the Owner to Construct the Necessary Distribution System
Pursuant to A.A.C. R12-15-707, financial capability will be evaluated by the local
platting authority as a part of the process for obtaining a Certificate of Assured Water
Supply for each subdivision. The application for a Certificate of Assured Water Supply
includes a Verification of Construction Assurance for a Proposed Subdivision form. This
form should be signed by the appropriate platting entity to provide evidence of financial
capability. This requirement of an assured water supply will be evaluated upon
application for a Certificate of Assured Water Supply.

The term of this Analysis of Assured Water Supply is ten years from the date of this letter and may be renewed upon request, subject to approval by the Department. Throughout the term of this determination, the projected demand of this development will be considered when reviewing other requests for assured water supply in the area.

Prior to obtaining plat approval by the local platting authority and approval of the public report by the Department of Real Estate, a Certificate of Assured Water Supply must be obtained for each subdivision plat. The findings of this Analysis of Assured Water Supply may be used to demonstrate that certain requirements for a Certificate have been met. This determination may be invalidated if the development plan or other conditions change prior to filing for a Certificate of Assured Water Supply.

Questions may be directed to the Office of Assured Water Supply at (602) 417-2465.

mark Frank

Mark Frank, Acting Assistant Director Water Management Division

cc: Phoenix Active Management Area

# **EXHIBIT**

"C"

- A. Yes, that's correct. And also once filed the
  physical availability determination can be used by others
  to demonstrate their physical supply.
- Q. And can you tell us what an analysis of assured water supply is?
- A. An analysis is a level higher, if you will, of
  the proceedings before the Department. When you have a
  development that is still in the early planning stages,
  you could apply for a determination by the Department that
  you have demonstrated a component of the assured water
  supply and for physical availability.
- For example, you could get what is called an 12 analysis of assured water supply from the Department that 13 will say that there is indeed a physical supply available 14 for your development. And it has the unique component of 15 now reserving that water supply to your development 16 because once issued by the Department an analysis is 17 treated as if that water has been physically removed from 18 19 the basin.
- Q. And what then is a certificate of assured water supply?
- A. A certificate is the ultimate determination of
  assured water supply specific to a particular subdivision.
  A developer of a master-planned community will come into
  the Department, demonstrate a proposed plat design and

- demonstrate all five of the components of assured water
- supply in order to get a certificate of assured water
- 3 supply issued.
- They are specific to the subdivision to which
- 5 they are issued and specific to the developer to which
- 6 they are issued.
- Q. And you mentioned the five components.
- What are those?
- 9 A. Physical availability for the 100-year term;
- legal availability of the groundwater that you propose to
- use; adequate quality of the water that you propose to
- use; a continuous availability, which is a criteria more
- relevant to surface water; and finally financial
- capabilities, that you have the financial wherewithal to
- build the infrastructure necessary to provide the water.
- Q. And could you tell us then what is a designation
- of assured water supply?
- 18 A. Yes. The other alternative in assured water
- 19 supply is to have a municipal water provider -- and that
- term was defined in the groundwater code -- provide water
- under a designation of assured watered supply.
- There the Department does not look at one
- specific subdivision and issue a certificate for one
- specific subdivision; it looks to the service area and
- contemplated service area of the municipal provider and

- applies the assured water supply principles to that
- provider to make sure that they can demonstrate physical,
- 3 continuous, legal, availability, financial capability and
- 4 adequate quality.
- 5 Q. And you mentioned municipal provider.
- In DWR talk, does that include a private water
- 7 company?
- A. Yes, it does. The definition includes private
- 9 water companies.
- 10 Q. And from a regulatory perspective, is a
- designation better than a certificate or the other way
- 12 around?
- 13 A. Yes -- well, they are different animals, but from
- a water management perspective, the Department and my
- years at the Department, I was part of this philosophy,
- and it continues today, the designation is a better water
- management tool because it is under constant review.
- Every year the designated provider must report to
- the Department how much water they are using, how much
- they are going to use in the upcoming years and
- specifically how much water they are going to use in the
- next two ensuing years. And the Department takes a very
- critical look to make sure that that provider can still
- meet all of the criteria of assured water supply for that
- two-year-projected demand, covering, of course, all of

- their current and committed demands.
- So the Department of Water Resources gets to have
- 3 the continued ability to look closely at the provider,
- 4 examine their designated water portfolio and make sure
- 5 that they have an assured water supply.
- Whereas a certificate is issued as a one-time
- <sup>7</sup> snapshot. Say a certificate is issued in December of
- 8 2007, that means that as of today the Department has
- 9 concluded that a assured water supply exists. And once
- that certificate is issued and one house is sold, it is
- irrevocable. So that subdivision can be built to its
- entire build out without any opportunity for the
- Department to ever second-guess the physical availability
- of the water.
- O. And, Mr. Pearce, at a recent open meeting the
- commissioners had some questions about the Hassayampa
- sub-basin study, so let's talk a little bit about that.
- What was the drive of that study?
- A. About five years ago the Department of Water
- 20 Resources was seeing a significant increase in application
- for analyses in the greater Buckeye area and to the west
- to the point where the requests for analyses, which again,
- tie up blocks of water in the basin, were exceeding the
- comfort level of the Department as to how much water they
- believed or they knew was in storage in this particular

- 1 sub-basin.
- They began to express those concerns to the
- 3 various applicants and suggested that they would refuse to
- issue analyses at the level of the applications unless
- 5 those developers could prove the quantities of water in
- 6 storage. And that was the beginning of the Hassayampa
- <sup>7</sup> sub-basin model.
- Q. And could you describe the process of preparing
- <sup>9</sup> this study?
- 10 A. Yes. In fact, I was involved from the outset.
- 11 Myself and Jim Johnson went together to the director of
- Water Resources, Mr. Hurb Guenther, G-u-e-n-t-h-e-r,
- discussed the concept with him, received his advice and
- 14 tentative approval.
- We then committed the partnership to writing
- among the developers who funded the study. We selected as
- the landowners to use the Town of Buckeye as a willing
- manager of the project so long as the contracts were led
- by the Town of Buckeye.
- The Department of Water Resources dedicated and
- we helped fund a specific employee to act as liaison to
- the process so that DWR would have input into the model
- creation from the outset. And the process was undertaken.
- The Town the Buckeye led the contract after
- evaluation to the consulting firm of Brown & Coldwell.

- 1 They did all of the scientific and technical work and they
- 2 produced a final product.
- Q. And you got into this a little bit, but could you
- describe your involvement in the study?
- A. I was one of a group of probably five or six
- 6 attorneys that were imminently involved in the model
- development, not on the technical side but more to ensure
- 8 that the model complied with concepts and principles of
- 9 Arizona groundwater law and effluent law and other aspects
- of Arizona groundwater management practice.
- Because we wanted the model to be a practical
- tool that could be used by the Department of Water
- Resource and its assured water supply analyses and by the
- Town of Buckeye and its planning and by the planning areas
- outside of Buckeye so that they could use this as a tool
- to develop their master-planned communities.
- Q. And how was the Department of Water Resources
- 18 involved?
- 19 A. They had a technical liaison, as I said, to
- Brown & Coldwell who provided advice and insight into what
- the Department would be looking for. The Department did
- not actually prepare the model because in their regulatory
- capacity it was believed that they would be better off
- reviewing it as a completed project than undertaking their
- own scientific analysis.

numeric model is state-of-the-art.

15

16

Page 96

- Q. And can you prepare this model to other models that you have seen used in the state or elsewhere?
- A. Yes. This is a what is called a numeric model or a computer numeric model. It's the most sophisticated type of model that is currently available. In years past many simpler models have been used to demonstrate assured water supplies, physical availability, but the computer
- 10 one took approximately two years to develop. They are
  11 tested repeatedly and calibrated so they can produce
  12 accurate results. And I have been exposed to many
  13 different types of models and many different qualities of
  14 models, even in a litigation context, and this is probably

the best model I have ever been a part of. It's very,

Q. And could you summarize the results that the model produced?

very well done and very, very accurate.

20 that the model is constructed by attempting to determine 21 the physical characteristics of the aquifer and to 22 determine how much groundwater is in storage in that 23 aquifer. And then it applies demands, pumping demands to 24 that aquifer and attempts to determine how much water 25 could be pumped before the aquifer drops to a level of

- 1,000 feet below land surface, which is the maximum drop
- allowed under assured water supply principles over the
- $^{3}$  100-year term.
- So the purpose of the model was to show that,
- 5 given the projected demands of the various developments,
- 6 how long it would take before the basin began to reach
- 7 those critical groundwater levels. And in order to do
- 8 that we set up ten different scenarios of how development
- 9 may occur in the basin; what water supplies might be used
- in the basin; how much groundwater would be used versus
- 11 reclaimed, recycled or effluent-type water, Central
- 12 Arizona Project waters.
- All of those types of management assumptions were
- depicted by running a range of these ten different
- scenarios. From the extreme, which I believe was scenario
- No. 10, of using only groundwater as the sole source of
- supply, to what we call the assured water supply model,
- which was a mix that we developed thinking it was
- realistic, to even more liberal models that showed more
- renewable supplies, more effluent reuse and things.
- So it developed a range of results, each depicted
- in one of these ten scenarios.
- Q. And you mentioned one of those scenarios was the
- one you called the assured or realistic one.
- What did that show?

- 1 A. That showed that there would be sufficient water
- to cover all of the projected demands of all of the
- participants in the model study plus all the current
- 4 committed demand in the entire basin.
- Q. And, Mr. Pearce, could you explain how recycled
- 6 water relates to this study?
- 7 A. Yes. Recycled water was a component in the
- assured water supply scenario. We used an assumption of a
- 9 30 percent return on total water delivered to either be
- reused or recharged. When we constructed the model
- assumptions, we meant to recharge that water into the
- aguifer rather than try to deal with the more difficult
- concepts of reuse.
- So the model, assured water supply model, is
- constructed using groundwater as the principal source of
- supply, Central Arizona Project water delivered to those
- that have Central Arizona Water Project capability, and
- effluent reclaim/recycled claim water for the balance.
- O. And when was this study delivered to the
- Department of Water Resources?
- 21 A. November 2006.
- Q. And what are they doing to it?
- 23 A. They are evaluating it on two levels. They are
- evaluating it in the hydrology division to make sure that
- the science is correct and that the model has corrective

- assumptions built into it to defining the aquifer
- parameters and that it will accurately predict current
- 3 conditions and then, by the same token, accurately predict
- 4 future conditions.
- 5 Q. And how does all this relate to the proposed
- 6 designation of assured water supply for Water Utility of
- 7 Greater Tonopah?
- A. I'm sorry. I will answer your question, but I
- 9 forgot the second half of the analysis.
- If it is to look at it from a water management
- 11 perspective and decide what -- which of the ten scenarios
- is best suited to determine whether or not these
- developments have assured water supply.
- And the Department is leaning towards a scenario
- that would be based solely on groundwater with some
- component of recycled water, and that is where it is right
- now. We are discussing with them how to properly
- incorporate recycled water into the overall results. It's
- extremely critical for the Water Utility of Greater
- Tonopah in this sense:
- The scenario, No. 10, which you might consider
- the worst-case scenario in this model, shows that there
- 23 are indeed challenges to providing enough water to service
- all of the projected demands in the Hassayampa sub-basin.
- In fact, if you used groundwater only for the

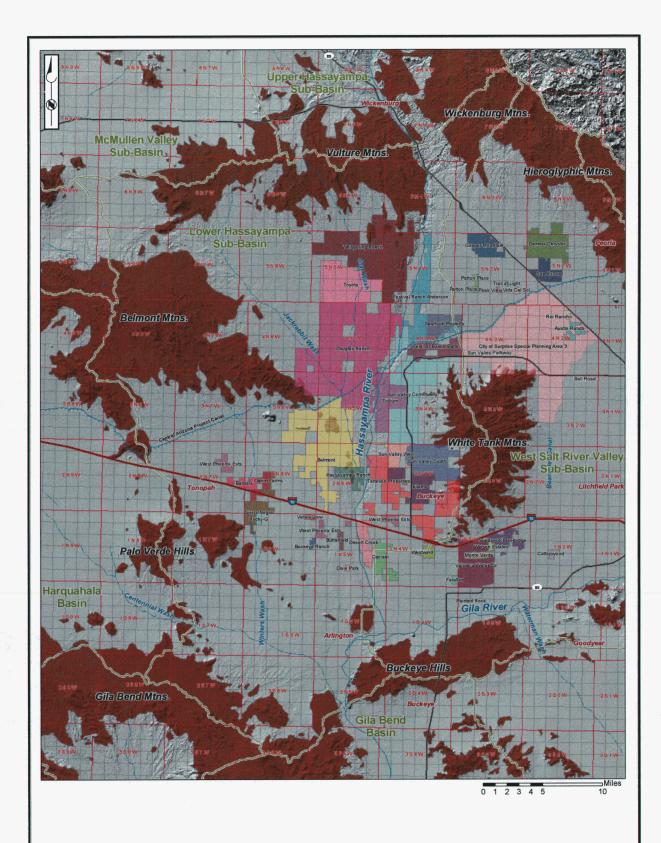
- support of all of those projected demands, there would be
- times when certain wells would not be able to produce
- 3 assured water supply water.
- It's particularly true in some of the areas being
- contemplated within the CC&N, and so it's absolutely
- 6 critical that a water provider in this area that is trying
- 7 to serve these uses depicted on this map be able to
- 8 maximize the use of recycled or recycled water within
- these developments to ensure that they will have the
- 100 -year assured water supply.
- 11 Q. And will the study be used as part of the
- application process for the designation?
- 13 A. Yes. I am preparing a designation application,
- or at least I'm supervising it. We will rely on this
- model as our hydrologic proof of physical availability.
- Together with a showing, we will able to recapture and
- recycle a large quality of that water. And then between
- the two, we will definitely meet the assured water supply
- standards for a designation provided, not only in the near
- term, but for perpetuity.
- Q. And, Mr. Pearce, the time frame that is in the
- Staff report of two years to obtain the designation, does
- that seem feasible to you?
- A. It is because with this study already under
- consideration by the Department, preliminary feedback from

- the Department that the science here is good, knowing what
- the overall strategy and plans for this particular water
- provider are in this sub-basin, it should be a very
- 4 straightforward application with a lot of proof already in
- place. We think that two years is a very reasonable time
- and certainly hope we can do it in less.
- Q. And earlier you had mentioned that in analysis
- 8 reserves, the water supply is listed in the analysis.
- Do any of the developers on the map or that are
- involved in this case have an existing analysis of assured
- water supply?
- 12 A. Yes, they do. Several of them do.
- And even among the ones that we discussed here
- today, the only one that does not is the 339th Avenue
- project. All of the other ones discussed today have
- analyses that were issued by the Department of Water
- 17 Resources.
- And that is a critical feature in the designation
- because with that water being deemed to be removed from
- the basin under the analysis, there would not be a
- 21 physical supply out here for Water Utility of Greater
- Tonopah.
- So our plan is to work with those individual
- developments, whereby they would pledge that analysis to
- us and transfer that determination of physical

- availability to Water Utility of Greater Tonopah in
- exchange for contractual commitments from the utility to
- serve back that water as assured water supply water under
- the designation. And we are well under that process and
- 5 have been quite successful so far in getting those
- 6 contracts in place.
- Q. Thank you, Mr. Pearce.
- Let's ask the bottom-line question: Based on
- 9 what you feel to be a realistic scenario, will there be
- enough water to serve this extension area?
- 11 A. Yes. Yes. We have met now with the Department
- of Water Resources on multiple occasions. Like I said, we
- have received feedback on the model. We received feedback
- on the designation model. We believe that the Department
- of Water Resources will conclude and we are very confident
- ourselves that there will be enough water to serve all the
- development contemplated in this CC&N extension.
- MR. SABO: And, Your Honor, thank you for your
- patience with that. It did go a little longer than I was
- thinking. And Mr. Pearce is available for
- 21 cross-examination.
- ALJ KINSEY: Thank you, Mr. Sabo.
- Mr. Wiley, any questions?
- MR. WILEY: I have no questions, Judge.
- ALJ KINSEY: And, Staff, any questions for this

# **EXHIBIT**

"D"



### **EXPLANATION**



Property Boundaries



Township and Range Boundaries



Sections



Groundwater Basins



### FIGURE 2-1 GENERALIZED STUDY AREA

LOWER HASSAYAMPA SUB-BASIN COMPUTER MODEL TOWN OF BUCKEYE, ARIZONA